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## State Water Resources Control Board

### Division of Water Rights

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Edmund G. Brown Jr.  
Governor

TO: ENCLOSED CACHUMA HEARING SERVICE AND GENERAL MAILING LISTS

RELEASE OF SECOND REVISED DRAFT ENVIRONMENTAL IMPACT REPORT PREPARED IN CONNECTION WITH CONSIDERATION OF MODIFICATIONS TO THE U.S. BUREAU OF RECLAMATION'S WATER RIGHT PERMITS 11308 AND 11310 (APPLICATIONS 11331 AND 11332) TO PROTECT PUBLIC TRUST VALUES AND DOWNSTREAM WATER RIGHTS ON THE SANTA YNEZ RIVER BELOW BRADBURY DAM (CACHUMA RESERVOIR) (SCH#1999051051)

The above-referenced second revised draft Environmental Impact Report (2<sup>nd</sup> RDEIR) is available for public review. The proposed project analyzed in the 2<sup>nd</sup> RDEIR consists of potential modifications to the U.S. Bureau of Reclamation's (Reclamation) water right permits for the Cachuma Project in order to provide appropriate protection of downstream water rights and public trust resources on the Santa Ynez River. The Cachuma Project includes Bradbury Dam, which impounds water on the Santa Ynez River in northern Santa Barbara County, forming Cachuma Lake. The Cachuma Project provides water to the Cachuma Project Member Units (Member Units) for irrigation, domestic, municipal, and industrial uses. The Member Units consist of the City of Santa Barbara, Goleta Water District, Montecito Water District, Carpinteria Valley Water District, and the Santa Ynez River Water Conservation District — Improvement District #1.

The State Water Resources Control Board (State Water Board) prepared a previous RDEIR for this Project and circulated it for public comment in July 2007 (2007 RDEIR). Additionally, the State Water Board prepared the original DEIR and circulated it for comment in August 2003 (2003 DEIR).

In response to comments on the 2007 RDEIR, the State Water Board updated information on water supply, biological resources, oak trees, and recreation. In addition, the 2<sup>nd</sup> RDEIR has been updated to reflect a number of changes that have occurred since the 2007 RDEIR was prepared. Finally, the 2<sup>nd</sup> RDEIR makes some changes and corrections in response to comments on the 2007 RDEIR. The 2<sup>nd</sup> RDEIR does not contain a complete response to comments. Pursuant to the state California Environmental Quality Act Guidelines (CEQA) Section 15088.5(a), a lead agency is required to recirculate an Environmental Impact Report (EIR) when significant new information is added to an EIR after public notice of the availability of the draft EIR but before certification. New information is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. Further, pursuant to the state CEQA Guidelines Section 15088.5(b), recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

*California Environmental Protection Agency*

Consistent with the 2007 RDEIR, the 2<sup>nd</sup> RDEIR finds that Alternatives 3B, 3C, 4B, 5B, and 5C, which entail raising Bradbury Dam to create additional storage capacity, could have significant environmental impacts (Class I) to oak trees at Lake Cachuma. In addition, the 2<sup>nd</sup> RDEIR finds significant but mitigable impacts (Class II) could occur to sensitive wildlife under Alternative 4B; and to cultural resources under Alternatives 3B, 3C, 4B, 5B, and 5C.

The 2<sup>nd</sup> RDEIR also finds adverse but not significant impacts (Class III) could occur to surface water hydrology under Alternatives 3B, 3C, 4B, 5B, and 5C.

The 2<sup>nd</sup> RDEIR finds that three of the alternatives analyzed (Alternatives 3B, 5B and 5C) could result in shortages to Member Units' water supply in critical drought years. This could have significant, unavoidable indirect environmental impact (Class I) if the Member Units make up for the shortages by increasing groundwater pumping, implementing a temporary water transfer, or desalinating seawater. The 2007 RDEIR only identified significant unavoidable impacts (Class I) with respect to water supply for Alternative 5B.

The 2<sup>nd</sup> RDEIR also finds that both Alternatives 3C and 4B are environmentally superior (fewest significant impacts). However, because Alternative 3C is the No Project Alternative, in that it provides for the continuation of operations at Bradbury Dam as currently being implemented, Alternative 4B is determined to be the environmentally superior alternative under CEQA. As stated above, the Guidelines Section 15088.5(a)(1) requires that an EIR be re-circulated if a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented. When revising a DEIR, the lead agency may recirculate only those portions of the document that have been revised, and request that reviewers limit their comments to the revised chapters or portions of the document. (Cal. Code Regs., tit. 14, § 15088.5, subds. (c) & (f)(2).) Although a complete copy of the 2<sup>nd</sup> RDEIR is available for public review, only Sections 4.3 and 6.0 are being recirculated for comment, and the State Water Board requests that reviewers limit their comments to those revised portions.

The State Water Board will combine comments made on the previous EIRs (August 2003 DEIR and July 2007 RDEIR) and comments made on this 2<sup>nd</sup> RDEIR, and include a complete response to all comments in the Final EIR that the State Water Board will prepare after circulating this document.

A copy of the 2<sup>nd</sup> RDEIR is being provided on compact disk (CD) to the parties to the State Water Board hearing for this project under cover of this letter. Copies are also available upon request and may be obtained by calling Jane Farwell at (916) 341-5349. Copies on CD are available free of charge; hard copies are available for the cost of reproduction. Copies of the 2<sup>nd</sup> RDEIR and documents referenced in the 2<sup>nd</sup> RDEIR are available for public review from 8:00 a.m. to 4:30 p.m. Monday through Friday in the Records Unit of the State Water Board, Division of Water Rights (Division), which is located on the Second Floor of the Joe Serna Jr./CalEPA Headquarters Building, 1001 I Street, Sacramento, California. A copy of the 2<sup>nd</sup> RDEIR also has been posted on the Division's website at [http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/hearings/cachuma/](http://www.waterboards.ca.gov/waterrights/water_issues/programs/hearings/cachuma/)

Comments on the 2<sup>nd</sup> RDEIR must be received by close of business on May 16, 2011. Again, comments should be confined to information provided in Section 4.3, Water Supply, or Section 6.0, Comparison of Alternatives that is new or has been changed from the 2007 RDEIR.

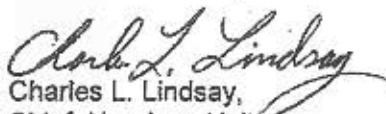
Comments should be addressed to:

Ms. Jane Farwell  
Division of Water Rights  
State Water Resources Control Board  
P.O. Box 2000  
Sacramento, CA 95812-2000

Comments may be hand delivered to the same addressee at 1001 I Street, Second Floor, Division of Water Rights — Records Unit during the office hours referenced above. In addition, comments may be, and are encouraged to be, submitted via electronic mail to [JFarwell@waterboards.ca.gov](mailto:JFarwell@waterboards.ca.gov) via fax to (916) 341-5400, but must be followed by an original hard copy.

If you have any questions regarding the 2nd RDEIR, please contact Jane Farwell at [JFarwell@waterboards.ca.gov](mailto:JFarwell@waterboards.ca.gov) or (916) 341-5349.

Sincerely,

  
Charles L. Lindsay,  
Chief, Hearings Unit  
Division of Water Rights

Enclosure: Service Lists

## EXECUTIVE SUMMARY

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### ES-1 PROPOSED PROJECT

The proposed project analyzed in this 2<sup>nd</sup> Revised Draft Environmental Impact Report (Revised Draft EIR) consists of potential modifications to the U.S. Bureau of Reclamation's (Reclamation) water right permits for the Cachuma Project in order to provide appropriate protection of downstream water rights and public trust resources on the Santa Ynez River.

The proposed project analyzed in this 2<sup>nd</sup> Revised Draft EIR consists of potential modifications to Reclamation's existing water rights permits to provide appropriate protection of downstream water rights and public trust resources on the Santa Ynez River. The proposed project, as listed in the Notice of Preparation (NOP) issued by the State Water Resources Control Board (SWRCB), is:

*Development of revised release requirements and other conditions, if any, in the Reclamation water rights permits (Applications 11331 and 11332) for the Cachuma Project. These release requirements will take into consideration the National Marine Fisheries Service's Biological Opinion and the draft Lower Santa Ynez River Fish Management Plan and other reports called for by Order WR 94-5. The revised release requirements are to provide appropriate public trust and downstream water rights protection. Protection of prior rights includes maintenance of percolation of water from the stream channel as such percolation would occur from unregulated flow, in order that the operation of the project shall not reduce natural recharge of groundwater from the Santa Ynez River below Bradbury Dam.*

Under Section 15378 of the California Environmental Quality Act (CEQA) Guidelines, a "project" is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." A project includes activities directly undertaken by any public agency such as public works construction, as well as activities involving the issuance or modification of a permit for use by other agencies. Modification of the release requirements and other conditions of Reclamation's water rights could affect the physical environment on the Santa Ynez River, and as such represents a project.

### ES-2 PROJECT OBJECTIVES

The State CEQA Guidelines (Sec. 15124(b)) indicate that the EIR, as part of the project description, should contain "a statement of objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project."

The objectives for the project are:

- Protecting public trust resources, including but not limited to steelhead, red-legged frog, tidewater goby, and wetlands, in the Santa Ynez River downstream of Bradbury Dam, to the extent feasible and in the public interest, taking into consideration: (1) the water supply impacts of measures designed to protect public trust resources, and (2) the extent to which any water supply impacts can be minimized through the implementation of water conservation measures;
- Protecting senior water right holders from injury due to changes in water quality resulting from operation of the Cachuma Project, including water quality effects in the Lompoc Plains groundwater basin that impair any senior water right holder's ability to beneficially use water under prior rights; and
- Protecting senior water right holders from injury due to a reduction in the quantity of water available to serve prior rights.

### ES-3 BACKGROUND

The Cachuma Project includes Bradbury Dam, which impounds water on the Santa Ynez River in northern Santa Barbara County, forming Cachuma Lake. The Cachuma Project provides water to the Cachuma Project Member Units for irrigation, domestic, municipal, and industrial uses. The Member Units consist of the City of Santa Barbara, Goleta Water District (GWD), Montecito Water District (MWD), Carpinteria Valley Water District (CVWD), and the Santa Ynez River Water Conservation District – Improvement District #1 (SYRWCD, ID#1).

Reclamation owns all project facilities and operates Bradbury Dam. The Member Units have assumed responsibility for operation and maintenance of the Cachuma Project facilities, other than Bradbury Dam. The Member Units formed the Cachuma Operation and Maintenance Board (COMB) to carry out these responsibilities.

In 1958, the SWRCB's predecessor, the State Water Rights Board, issued Permits 11308 and 11310 to Reclamation. The permits authorize Reclamation to divert and store water from the Santa Ynez River using Cachuma Project facilities. A condition of the permits requires Reclamation to release enough water to satisfy downstream users with senior rights to surface water and to maintain percolation of water from the stream channel in order that operation of the Cachuma Project does not reduce natural recharge of groundwater from the Santa Ynez River. The State Water Rights Board reserved jurisdiction to determine the amount, timing, and rate of releases necessary to satisfy downstream rights. Through a series of subsequent water right orders, the State Water Resources Control Board (SWRCB) modified the release requirements imposed on Reclamation and extended its reservation of jurisdiction.



In 1987, the California Sportfishing Protection Alliance (CSPA) filed a complaint with the SWRCB, which alleged that Cachuma Project operations had impacted steelhead trout in violation of the constitutional prohibition against the misuse of water. CSPA's complaint has not been resolved.

In December 1994, the SWRCB issued Order WR 94-5. The order continued the reservation of jurisdiction over Reclamation's permits until long-term permit conditions were set to protect downstream water right holders and set a deadline of December 1, 2000, to commence a hearing on this issue. Order WR 94-5 required Reclamation to conduct various studies and collect certain data for use by the SWRCB in the hearing. In addition, Order WR 94-5 required Reclamation to prepare any additional environmental documentation that the Chief of the Division of Water Rights determined was necessary to comply with the California Environmental Quality Act (CEQA) in connection with the SWRCB's consideration of modifications to Reclamation's permits. With direction from SWRCB staff, Reclamation prepared an environmental impact report (EIR) to comply with the order.

The SWRCB issued a NOP to prepare an EIR on May 19, 1999, to interested local, state, and federal agencies, as well as to environmental groups, landowners, and other parties with interests in the Santa Ynez River Watershed. The SWRCB received comment letters from a number of interested parties. In 2000, the SWRCB provided Reclamation with refinements to the alternatives described in the original NOP. This resulted in the development of seven variations of the original four alternatives to reflect the Biological Opinion issued by NMFS.

In November 2001, the SWRCB staff provided additional clarification to Reclamation concerning the December 2000 set of alternatives. SWRCB staff clarified that the baseline operations alternative should reflect any changes in Cachuma Project operations that had occurred since NMFS issued the Biological Opinion.

On August 8, 2003, the SWRCB issued a Draft EIR for public review and comment. In comments on the 2003 Draft EIR, California Trout (CalTrout) argued that the Draft EIR should be revised to include consideration of a different project alternative designed to protect fishery resources in the Santa Ynez River. The new alternative was described as Alternative 3A2 in a 1995 Environmental Impact Report/Environmental Impact Statement prepared by Reclamation and Cachuma Project water supply contractors in connection with the renewal of the water supply contract for the Cachuma Project. In response to CalTrout's comments, the SWRCB has developed two new alternatives, Alternatives 5B and 5C, which are modified versions of Alternative 3A2. The SWRCB has revised the August 2003 Draft EIR to analyze those alternatives.

The Revised Draft EIR included sections on background information and alternatives analyzed in the 2003 Draft EIR to establish a context for the analysis of Alternatives 5B and 5C, but focused on the analysis of the new alternatives. In addition, the Revised Draft EIR was updated to reflect a number of changes, including the surcharging of Cachuma Lake to 2.47 feet, that have occurred since the 2003 Draft EIR was prepared. Finally, the Revised Draft EIR made some changes and corrections in response to comments on the 2003 Draft EIR. The Revised Draft EIR did not contain, however, a complete response to comments.

#### ES-4                    **ALTERNATIVES CONSIDERED**

The following six alternatives, representing baseline conditions, yet-unconsidered modified CalTrout alternatives, and previously considered alternatives included for comparison, were analyzed as part of the Revised Draft EIR:

2. Baseline Operations under Orders WR 89-18 and 94-5 and the Biological Opinion (interim release requirements only) – environmental baseline conditions.
- 3B. Operations under the Biological Opinion assuming Reclamation achieves a 3.0-foot surcharge, except that releases for fish rearing and passage will be provided with a 1.8-foot surcharge.
- 3C. Existing operations under the Biological Opinion assuming Reclamation achieves a 3.0-foot surcharge.
- 4B. Operations under the Biological Opinion assuming Reclamation achieves a 3.0-foot surcharge and the discharge of SWP water to the river near Lompoc in exchange for water available for groundwater recharge in the Below Narrows Account established by Order WR 73-37, as amended by Order WR 89-18.
- 5B. Operations under the proposed CalTrout Alternative 3A2 during wet and above-normal water year types, with operations under the Biological Opinion during below-normal, dry and critical water year types, assuming Reclamation achieves a 1.8-foot surcharge.
- 5C. Operations under the proposed CalTrout Alternative 3A2 during wet and above-normal water year types, with operations under the Biological Opinion during below-normal, dry, and critical water year types, assuming Reclamation achieves a 3.0-foot surcharge.

On July 31, 2007, the SWRCB released the Revised Draft EIR for a 60-day public review July 31 to September 28, 2007.

A summary of the alternatives is provided in **Table ES-1, Summary of Alternatives Addressed in the EIR.**

**Table ES-1**  
**Summary of Alternatives Addressed in the Revised Draft EIR**

Alternative	Key Elements
2. Baseline condition operations - operations incorporating current Biological Opinion requirements, including interim rearing target flows.	Includes Order WR 89-18 releases with revised ramping schedule, releases for interim rearing target flows, emergency winter storm operations, SWP water release restrictions, Hilton Creek gravity feed and pump releases, and surcharging at 0.75'.  This alternative also includes certain non-flow fish conservation measures required by the Biological Opinion, affecting the mainstem and tributaries.
3B. Operations incorporating Biological Opinion requirements, including long-term rearing target flows. Surcharging at 1.8'.	This alternative represents the new operations to be implemented as required by the Biological Opinion assuming Reclamation achieves a 3.0' surcharge, except that all releases for rearing and passage will be provided from a combination of 1.8' surcharging and water supply. Includes emergency winter storm operations, SWP water release restrictions, Hilton Creek gravity and pumped releases, and Order WR 89-18 releases with revised ramping schedule.  This alternative also includes non-flow fish conservation measures required by the Biological Opinion, affecting the mainstem and tributaries.
3C. Operations incorporating Biological Opinion and Settlement Agreement requirements, including long-term rearing target flows. Surcharging at 3.0'.	This alternative represents the new operations to be implemented as required by the Biological Opinion and Settlement Agreement assuming Reclamation achieves a 3.0' surcharge. Releases for rearing and passage will be provided from a 3.0' surcharge.  Includes emergency winter storm operations, SWP mixing and associated water release restrictions, Hilton Creek gravity feed and pumped releases, and Order WR 89-18 including conjunctive use for fish flows releases and with revised ramping schedule.  This alternative also includes non-flow fish conservation measures required by the Biological Opinion, affecting the mainstem and tributaries.
4B. Operations incorporating Biological Opinion requirements, with additional actions to address water quality in the Lompoc Basin.	Includes fish releases under Alternative 3C, as well Discharge of SWP water to the river near Lompoc for recharge in exchange for Below Narrows Account water.
5B. Operations under the proposed CalTrout Alternative 3A2 during wet and above-normal water year types, with operations under the long-term Biological Opinion operations during below-normal, dry and critical water year types. Surcharging at 1.8'.	This alternative represents the operations to be implemented as required by the Biological Opinion assuming Reclamation achieves a 3.0' surcharge, except that all releases for rearing and passage will be provided from a combination of 1.8' surcharging and water supply. During wet and above-normal water year types, releases for fish will occur under the operations as proposed in CalTrout Alternative 3A2. Includes emergency winter storm operations, SWP water release restrictions, Hilton Creek gravity and pumped releases, and Order WR 89-18 releases with revised ramping schedule.  This alternative also includes non-flow fish conservation measures required by the Biological Opinion, affecting the mainstem and tributaries.



Alternative	Key Elements
5C: Operations under the proposed CalTrout Alternative 3A2 during wet and above-normal water year types, with operations under the long-term Biological Opinion operations during below-normal, dry and critical water year types. Surcharging at 3.0'.	<p>This alternative represents the operations to be implemented as required by the Biological Opinion assuming Reclamation achieves a 3.0' surcharge. All releases for rearing and passage will be provided from a 3.0' surcharge. During wet and above-normal water year types, releases for fish will occur under the operations as proposed in CalTrout Alternative 3A2.</p> <p>Includes emergency winter storm operations, SWP water release restrictions, Hilton Creek gravity feed and pumped releases, and Order WR 89-18 releases with revised ramping schedule.</p> <p>This alternative also includes non-flow fish conservation measures required by the Biological Opinion, affecting the mainstem and tributaries.</p>

In accordance with the *State CEQA Guidelines* Section 15126.6 (e)(1) the Draft EIR provides analysis of a "No Project" alternative. The purpose of describing and analyzing a No Project Alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline.

The 2003 Draft EIR considered Alternative 2, which represented the environmental baselines conditions at the time, as the No Project Alternative. The 2003 Draft EIR compared Alternative 2, then-existing conditions, to Alternative 1, historic conditions, in order to evaluate the changes that had taken place since Reclamation began to implement interim target flows pursuant to the Biological Opinion; Alternative 1 did not represent existing or baseline conditions.

As provided for by the *State CEQA Guidelines* Section 15126.6(e)(1), the No Project Alternative can analyze the existing conditions as they exist at the time that the environmental impact report is prepared, as well as what could be reasonably expected to occur in the foreseeable future if the permit applications were not approved, based on current plans and consistent with available infrastructure and services. As such, the Revised Draft EIR considered Alternative 3C, which reflect existing operations under the Biological Opinion, as the No Project Alternative. However, the Revised Draft EIR still considers Alternative 2 as the baseline conditions.

## ES.5 SUMMARY OF IMPACTS

The potential impacts of Alternatives 3B, 3C, 4B, 5B and 5C were evaluated using Alternative 2 as the environmental baseline. Alternative 2 represents the conditions that existed beginning in September 2000, when Reclamation began to implement interim release requirements under the Biological Opinion. Since that time, Reclamation has increased the surcharge of Cachuma Lake from 0.75 to 2.47 feet and has begun to implement long-term release requirements under the Biological Opinion. Accordingly, Alternative 2 no longer represents existing conditions. Nonetheless, Alternative 2 remains an appropriate baseline for

purposes of evaluating the potential impacts of the alternatives. Normally, the environmental conditions that exist at the time a lead agency issues a notice of preparation of an EIR constitute baseline conditions for purposes of the impacts analysis, even if conditions change during the environmental review process. (Cal. Code Regs, tit. 14, Section 15125, subd. (a).)

Moreover, the use of Alternative 2 as the baseline, as opposed to using current conditions as the baseline, provides a conservative estimate of the potential environmental impacts of the alternatives. Alternative 2 assumes a 0.75-foot surcharge. Accordingly, comparing the other alternatives, which assume either a 1.8- or 3.0-foot surcharge, to Alternative 2 results in the full disclosure of the potential environmental impacts of surcharging Cachuma Lake above 0.75-foot, even though some of those impacts already have occurred. By contrast, if current conditions, including a 2.47-foot surcharge, were used as the baseline, only the incremental impacts associated with increasing the surcharge from 2.47 feet to 3.0 feet would be disclosed.

Similarly, using Alternative 2 as the baseline results in a modest over-estimate of water supply related impacts. This is because the amount of water available from the Cachuma Project during a drought would be slightly less under current conditions than it would have been under Alternative 2, notwithstanding the recent 2.47-foot surcharge, due to implementation of the long-term release requirements under the Biological Opinion (Appendix F, Technical Memorandum No. 5, Table 22.) This reduction in the amount of water that would be available during a drought would not be included in the analysis if current conditions were used as the baseline for purposes of calculating water supply reductions under the various alternatives. Conversely, if Alternative 2 is used as the baseline, the incremental reduction in supply that would occur under current conditions is included in the analysis.

**Table ES-2** presents the impacts of the proposed alternatives (3B, 3C, 4B, 5B, and 5C) compared to environmental baseline conditions and operations (i.e., Alternative 2). Key findings are listed below:

- Alternatives 3B, 5B and 5C would result in potential shortages in supply during dry years that could require new sources of water, which could result in significant and unavoidable (Class I) impacts attributable to increased groundwater pumping, temporary water transfers, and desalination
- All of the alternatives, except Alternative 2 would have temporary significant unavoidable impacts (Class I) until such time that replacement trees become established and self-sustaining, which is estimated to take about 10 years. After this time, the loss of oaks is considered significant, but mitigable (Class II) impacts to oak trees.
- All of the alternatives would have potential significant, but mitigable (Class II) impacts to cultural resources.
- All of the alternatives would result in beneficial (Class IV) impacts to groundwater conditions; steelhead movement, migration and habitat; and riparian vegetation along the Santa Ynez River. In addition, Alternative 4B would have beneficial impacts related to surface water quality (TDS) in the Santa Ynez River.

Table ES-2  
Summary of Impacts of Different Alternatives

Impact	Alt 3B	Alt 3C	Alt 4B	Alt 5B	Alt 5C
<b>Significant, unmitigable (Class I)</b>					
Water supply					
Riparian and Lakeshore Vegetation	X			X	X
Oak trees (short-term/temporary)					
<b>Significant, but mitigable (Class II)</b>					
Riparian and Lakeshore Vegetation	X	X	X	X	X
Oak trees (long-term)					
Cultural Resources	X	X	X	X	X
<b>Adverse, but not significant (Class III)</b>					
Water supply					
Surface water hydrology		X	X		
Surface water quality		X	X	X	X
Riparian and Lakeshore Vegetation					
Substantially remove or convert existing upland vegetation types (excluding oak woodlands)	X	X	X	X	X
Frequency and amount of low flows (2-5 cfs)	X	X	X	X	X
Sensitive Aquatic and Terrestrial Wildlife					
Surcharge would result in the loss of upland wildlife habitat	X	X	X	X	X
Reduce the frequency of spills, and affect riparian	X	X	X	X	X
Substantially affect the survival of sensitive wildlife species	X	X	X	X	X
Impact to southwestern willow flycatcher	X	X	X	X	X
Recreation	X	X	X	X	X

Impact		Alt 3B	Alt 3C	Alt 4B	Alt 5B	Alt 5C
<b>Beneficial (Class IV)</b>						
Above the Narrows Aquifer (have a beneficial effect on the alluvial basin storage and groundwater elevation)		X	X	X	X	X
Surface Water Quality (recharge of the Lompoc Plain Groundwater Basin using higher quality water under Alternative 4B would have a beneficial effect at that location because it would improve surface water quality in the Lompoc Forebay during the discharge period)				X		
Lompoc Groundwater Basin (result in a potential decrease in TDS levels in the Lompoc Plain over time, and result beneficial effect on water quality in the Lompoc Plain, and in the quality of the drinking water for the City of Lompoc)		X	X	X	X	X
Riparian and Lakeshore Vegetation (Effects of uncontrolled downstream flows additional flows are expected to increase the instream riparian vegetation which is considered beneficial (Class IV) to wetland and riparian vegetation)		X	X	X	X	X
Southern California Steelhead and Other Fishes (increase the frequency of years with passage for anadromous <i>O. mykiss</i> due to releases to supplement passage resulting in a beneficial effect)		X	X	X	X	X
Sensitive Aquatic and Terrestrial Wildlife (increase the vigor and extent of wetland and riparian vegetation along the river, and indirectly benefit the associated aquatic and terrestrial wildlife, including sensitive species)		X	X	X	X	X

## ES-6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The environmentally superior alternatives would be Alternative 3C and Alternative 4B as they have the fewest significant impacts. These alternatives would not result in any significant and unavoidable impacts (Class I) to water supply but would result in temporary significant and unavoidable (Class I) impacts to oak trees. Impacts related to the loss of oak trees would become significant but mitigable (Class II) once the replacement of oak trees through planting is considered sustainable. Alternatives 3C and 4B would also result in significant impacts to cultural resources that could be mitigated to less than significant (Class II). Both Alternatives 3C and 4B would result in some level of beneficial impacts to groundwater storage, riparian vegetation and steelhead passage and habitat. Alternative 4B would also result in improved surface water quality for total dissolved solids (TDS) in the Santa Ynez River. Although Alternative 4B would have slightly more beneficial impacts, it would also have impacts related to the construction of a pipeline and outlet works to discharge SWP water into the Santa Ynez River.

Alternatives 3B, 5B, and 5C would result in significant and unavoidable (Class I) impacts to water supply related that could not be mitigated as well as significant impacts (Class I and Class II) to oak trees and, therefore, would not be the environmentally superior alternative.

Alternatives 3C and 4B meet the objectives as set forth for the proposed project including:

- Protecting public trust resources, including but not limited to steelhead, red-legged frog, tidewater goby, and wetlands, in the Santa Ynez River downstream of Bradbury Dam, to the extent feasible and in the public interest, taking into consideration: (1) the water supply impacts of measures designed to protect public trust resources, and (2) the extent to which any water supply impacts can be minimized through the implementation of water conservation measures.
- Protecting senior water right holders from injury due to changes in water quality resulting from operation of the Cachuma Project, including water quality effects in the Lompoc Plains groundwater basin that impair any senior water right holder's ability to beneficially use water under prior rights; and
- Protecting senior water right holders from injury due to a reduction in the quantity of water available to serve prior rights.

As Alternative 3C is the No Project Alternative, Alternative 4B would be the environmentally superior alternative as the State CEQA Guidelines<sup>1</sup> requires that another alternative other than the No Project be identified among the other alternatives if the No Project is environmentally superior. However, it would also have impacts related to the construction of a pipeline and outlet works to discharge SWP water into the Santa Ynez River.

<sup>1</sup> California Code of Regulations, Title 14, Division 6, Chapter 3, *California Environmental Quality Act Guidelines*, Section 15126.6(e)(2).